

SPECIFICATION AMENDMENTS

Please replace the paragraph on page 3, lines 11-20 with the following amended paragraph:

A1
However, knowledge of the physical topology of the network may not be sufficient for diagnosing an error in the network. To diagnose certain errors, logical path information is needed. One technique of gathering information on errors and configuration in a network that uses Internet Protocol ("IP") is path tracing for an IP packet. Path information defines the traversal of a packet or a sequence of packets from a source device to a destination device, whereas topology information defines either the physical or logical layout of a network without taking into account factors that affect the path traversed by a packet. The factors that affect the path traversed by a packet include spanning tree blocking, route determination, network misconfiguration, access-list prohibition, cable cuts, etc.

Please replace the paragraph on page 3, line 21 to page 4, line 2 with the following amended paragraph:

FIG. 1A is a block diagram of a network that illustrates the difference between path and topology. Access Switches 102a, 104a ~~is each~~ are connected to users 102b, 104b respectively. Core Switch 110 is connected to Backbone 112. Core Switch 110 is connected to Access Switch 102a and Access Switch 104a by intermediary devices such as Distribution Switch 106 and Root Bridge 108.

Please replace the paragraph on page 7, lines 2-10 with the following amended paragraph:

A2
The foregoing needs, and other needs and objects that will become apparent ~~for~~ from the following description, are achieved in the present invention, which comprises, in one aspect, a method of determining a Layer 2

A2
path between a source device and a destination device in a switched network, the method comprising the computer-implemented steps of: determining a Layer 3 path between the source device and the destination device, wherein the Layer 3 path comprises information identifying two or more Layer 3 devices; determining a subpath for each contiguous pair of Layer 3 devices in the Layer 3 path; and concatenating the subpaths to result in creating and storing information representing the Layer 2 path.

Please replace the paragraph on page 7, line 17, to page 8, line 5 with the following amended paragraph:

A3
According to another feature of this aspect is that selecting a relevant VLAN between the first and second nodes of the contiguous pair comprises the steps of: selecting a matching native VLAN of the first and second node of the contiguous pair as the relevant VLAN when the first interface and the second interface of the first and second nodes respectively of the contiguous pair are non-VLAN trunking interfaces; selecting a matching active VLAN that is designated to carry traffic to a next hop as the relevant VLAN when the first interface and the second interface of the first and second nodes respectively of the contiguous pair are VLAN trunking interfaces; and selecting a native VLAN that is on a non-VLAN trunking interface as the relevant VLAN when one of the first and second nodes of the contiguous pair has the non-VLAN trunking interface.

Please replace the paragraph on page 8, lines 6-13 with the following amended paragraph:

According to another feature, determining a subpath for each contiguous pair of Layer 3 devices further comprises the steps of: tracing a first path segment from a first node of the contiguous pair by following a spanning tree associated with a relevant VLAN for the contiguous pair to a root of the spanning tree; tracing a second path segment from a second node of the contiguous pair by following the spanning tree associated with the

A3 relevant VLAN for the contiguous pair to the root of the spanning tree; and concatenating the first and second path segments to result in creating and storing the subpath for the contiguous pair.

Please replace the paragraph on page 12, lines 8-9 with the following amended paragraph:

A4 FIG. 1C is a block diagram that illustrates a loop-free path that is created by the Spanning Tree;

Please replace the paragraph on page 19, lines 4-6 with the following amended paragraph:

A5 FIG. 6A is a block diagram that illustrates the process of tracing a path segment along the Spanning Tree from each node of the contiguous pair to the root of the Spanning Tree.
